

## AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

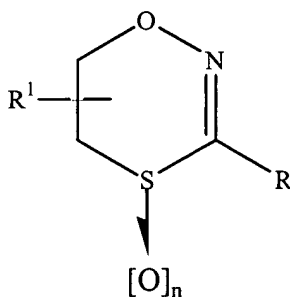
1. (currently amended) A preservative composition comprising, in synergistic proportions,

an oxathiazine compound plus a quaternary ammonium compound, wherein the weight ratio of oxathiazine compound to quaternary ammonium compound is from about 2:1 to about 1:50, or

an oxathiazine compound plus a triazole compound, wherein the weight ratio of oxathiazine compound to triazole compound is from about 50:1 to about 1:2, or

both an oxathiazine compound, a quaternary ammonium compound and a triazole compound, wherein the weight ratio of oxathiazine compound to quaternary ammonium compound is from about 2:1 to about 1:50 and the weight ratio of oxathiazine compound to triazole compound is from about 50:1 to about 1:2, wherein

(i) the oxathiazine compound is a compound of formula (I)



(I)

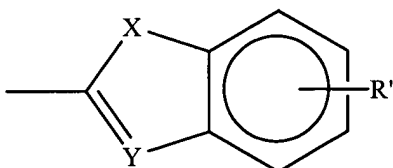
wherein n is 0, 1 or 2; R¹ is hydrogen, C₁-C₄ linear or branched alkyl, or benzyl; and R is:

(a) phenyl; naphthyl; phenyl substituted with 1 to 3 of the following substituents: hydroxyl, halo, C₁-C₁₂ alkyl, C₅-C₆ cycloalkyl, trihalomethyl, phenyl, C₁-C₅ alkoxy, C₁-C₅ alkylthio, tetrahydropyranyloxy, phenoxy, (C₁-C₄ alkyl)carbonyl, phenylcarbonyl, C₁-C₄ alkylsulfinyl, C₁-C₄ alkylsulfonyl, carboxy or its alkali metal salt, (C₁-C₄ alkoxy)carbonyl, (C₁-C₄ alkyl)aminocarbonyl, phenylaminocarbonyl, tolylaminocarbonyl, morpholinocarbonyl, amino, nitro, cyano, dioxolanyl, or (C₁-C₄

alkoxy)iminomethyl;pyridinyl; thienyl, preferably when n is not 2; furanyl; or thienyl or furanyl substituted with 1 to 3 of the following groups: alkyl, alkoxy, alkylthio, alkoxycarbonyl, halogen, trihalomethyl, cyano, acetyl, benzoyl, nitro, formyl, alkoxyaminomethyl, phenyl, or phenylaminocarbonyl, wherein the alkyl or alkoxy moiety is C<sub>1</sub>-C<sub>4</sub>, linear or branched;

or

(b)



wherein X is oxygen or sulfur; Y is nitrogen, -CH-, or -C(C<sub>1</sub>-C<sub>4</sub> alkoxy)-; and R'' is hydrogen or C<sub>1</sub>-C<sub>4</sub> alkyl plus

(ii) the quaternary ammonium compound is selected from compounds of formula (III):



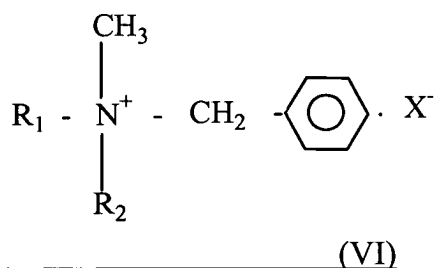
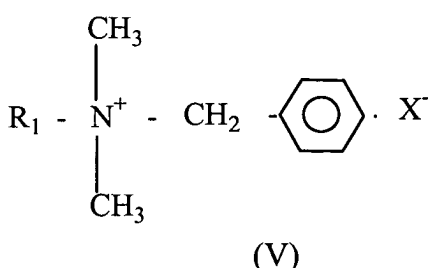
wherein R is an alkyl group having between 6 and 18 carbon atoms and X<sup>-</sup> is an anion which allows ready water solubility of the quaternary ammonium salt,

compounds of formula (IV):



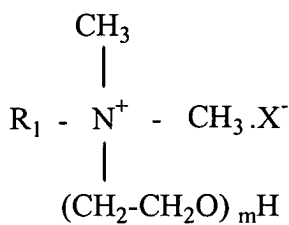
wherein  $R_1$  and  $R_2$  are alkyl groups which may be the same or different and which contain between 6 and 18 carbon atoms, and  $X^-$  is an anion as described above,

compounds of formulae (V) or (VI):

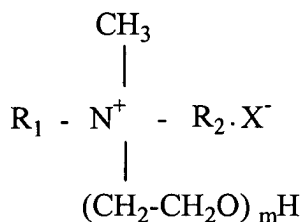


wherein  $R_1$  and  $R_2$  are alkyl groups which can be the same or different and which contain between 6 and 18 carbon atoms and  $X^-$  is an anion as described above,

compounds of formulae (VII) or (VIII):



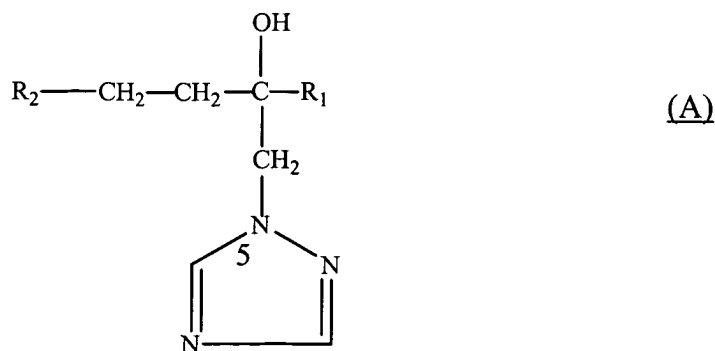
(VII)



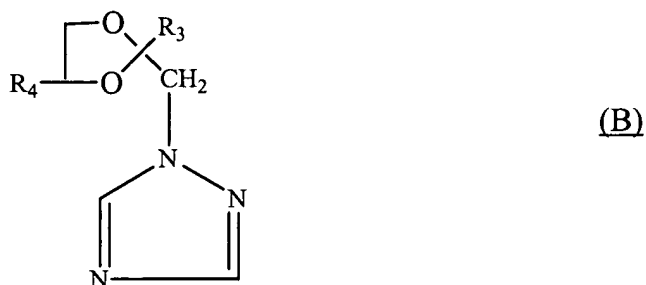
(VIII)

wherein  $R_1$  and  $R_2$  are alkyl groups which may be the same or different and which contain between 6 and 18 carbon atoms and wherein  $m$  is a number between 1 and 20 and

(iii) the triazole compound is selected from compounds of formula (A):



wherein  $R_1$  represents a branched or straight chain  $C_{1-5}$  alkyl group and  $R_2$  represents a phenyl group optionally substituted by one or more substituents selected from halogen atoms or  $C_{1-3}$  alkyl,  $C_{1-3}$  alkoxy, phenyl or nitro groups and compounds of formula (B):



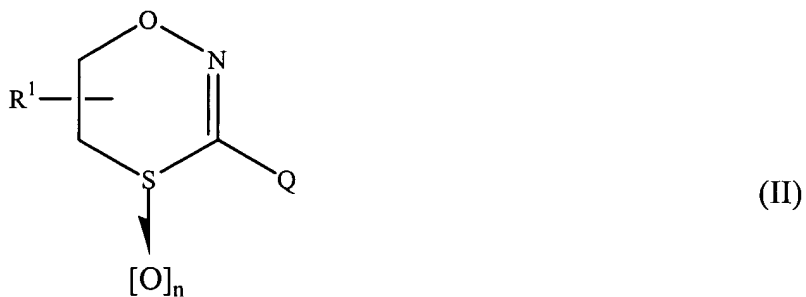
wherein  $R_3$  is as defined for  $R_2$  above and  $R_4$  represents a hydrogen atom or a branched or straight chain  $C_{1-5}$  alkyl group, or

the triazole compound is selected from a group of compounds comprising cyproconazole, hexaconazole and difenaconazole.

2. (original) A composition as claimed in claim 1 which comprises an oxathiazine compound, a quaternary ammonium compound and a triazole compound.

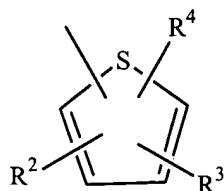
3. (cancelled)

4. (original) A composition as claimed in claim 3 wherein the oxathiazine compound is a compound of formula (II)



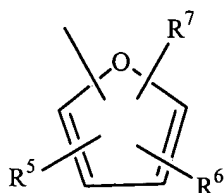
wherein n is 0, 1 or 2, R<sup>1</sup> is hydrogen, C<sub>1</sub>-C<sub>4</sub> linear or branched alkyl, or benzyl; and Q is:

(a)



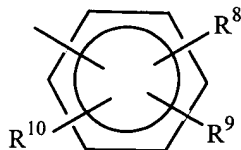
wherein R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are, individually, hydrogen, alkyl, alkoxy, alkylthio, alkoxycarbonyl, halogen, trihalomethyl, cyano, acetyl, formyl, benzoyl, nitro, alkoxyaminomethyl, phenyl, or phenylaminocarbonyl, wherein the alkyl or alkoxy moieties are all C<sub>1</sub>-C<sub>4</sub>, linear or branched, with the proviso that at least one of R<sup>2</sup>, R<sup>3</sup> or R<sup>4</sup> must be other than hydrogen;

(b)



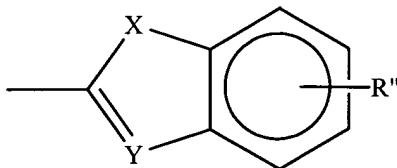
wherein R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are, individually, hydrogen, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkylthio, halogen, trihalomethyl, cyano, acetyl, formyl, benzoyl, nitro, phenyl, or phenylaminocarbonyl, with the proviso that at least one of R<sup>5</sup>, R<sup>6</sup> or R<sup>7</sup> must be other than hydrogen;

(c)



wherein  $R^8$ ,  $R^9$  and  $R^{10}$  are, individually, hydroxyl, halo,  $C_1$ - $C_{12}$  alkyl,  $C_5$ - $C_6$  cycloalkyl, trihalomethyl, phenyl,  $C_1$ - $C_5$  alkoxy,  $C_1$ - $C_5$  alkylthio, tetrahydropyranyloxy, phenoxy, ( $C_1$ - $C_4$  alkyl)carbonyl, phenylcarbonyl,  $C_1$ - $C_4$  alkylsulfinyl,  $C_1$ - $C_4$  alkylsulfonyl, carboxy or its alkali metal salt, ( $C_1$ - $C_4$  alkoxy)carbonyl, ( $C_1$ - $C_4$  alkyl)aminocarbonyl, phenylaminocarbonyl, tolylaminocarbonyl, morpholinocarbonyl, amino, nitro, cyano, dioxolanyl, or ( $C_1$ - $C_4$  alkoxy)iminomethyl; or

(d)



wherein X is oxygen or sulfur; Y is nitrogen, -CH-, or -C( $C_1$ - $C_4$  alkoxy)-; and  $R''$  is hydrogen or  $C_1$ - $C_4$  alkyl.

5. (original) A composition as claimed in claim 4 wherein the oxathiazine compound is selected from 3-(benzo[b]thien-2-yl)-5,6-dihydro-1,4,2-oxathiazine 4-oxide and 5,6-dihydro-3-(2-thienyl)-1,4,2-oxathiazine, 4-oxide.

6. (cancelled)

7. (currently amended) A composition as claimed in claim 16 wherein the triazole compound is selected from the group comprising tebuconazole, propiconazole, azaconazole, ~~hexaconazole~~, ~~difenaconazole~~, ~~cyproconazole~~, bromuconazole, epoxiconazole, metconazole, triticonazole, fenbuconazole, flusilazole, tetraconazole and penconazole.

8. (cancelled)

9. (previously presented) A method of treating a substrate of wood or other material which comprises applying to the substrate a composition as claimed in claim 1.

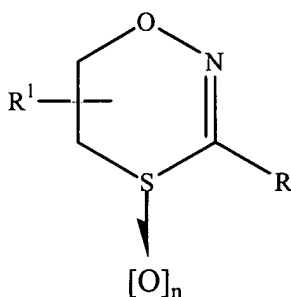
10. (original) A method as claimed in claim 9 wherein the substrate is affected by or at risk of being affected by soft rot.

11. (original) A method as claimed in claim 9 wherein the substrate is affected by or at risk of being affected by *Ascomycotina* or *Deuteromycotina*.

12. (previously presented) A method of preserving wood or other material which comprises applying to the wood or other material a composition as claimed in claim 1.

13. (currently amended) A method of enhancing the activity of an oxathiazine against fungi which comprises applying to wood or other material an oxathiazine plus a quaternary ammonium compound or a triazole compound, or both, wherein

(i) the oxathiazine compound is a compound of formula (I)



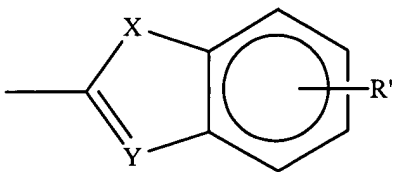
(I)

wherein n is 0, 1 or 2; R<sup>1</sup> is hydrogen, C<sub>1</sub>-C<sub>4</sub> linear or branched alkyl, or benzyl; and R is:

(a) phenyl; naphthyl; phenyl substituted with 1 to 3 of the following substituents: hydroxyl, halo, C<sub>1</sub>-C<sub>12</sub> alkyl, C<sub>5</sub>-C<sub>6</sub> cycloalkyl, trihalomethyl, phenyl, C<sub>1</sub>-C<sub>5</sub> alkoxy, C<sub>1</sub>-C<sub>5</sub> alkylthio, tetrahydropyranyloxy, phenoxy, (C<sub>1</sub>-C<sub>4</sub> alkyl)carbonyl, phenylcarbonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, carboxy or its alkali metal salt, (C<sub>1</sub>-C<sub>4</sub> alkoxy)carbonyl, (C<sub>1</sub>-C<sub>4</sub> alkyl)aminocarbonyl, phenylaminocarbonyl, tolylaminocarbonyl, morpholinocarbonyl, amino, nitro, cyano, dioxolanyl, or (C<sub>1</sub>-C<sub>4</sub> alkoxy)iminomethyl; pyridinyl; thienyl, preferably when n is not 2; furanyl; or thienyl or furanyl substituted with 1 to 3 of the following groups: alkyl, alkoxy, alkylthio, alkoxycarbonyl, halogen, trihalomethyl, cyano, acetyl, benzoyl, nitro, formyl, alkoxyaminomethyl, phenyl, or phenylaminocarbonyl, wherein the alkyl or alkoxy moiety is C<sub>1</sub>-C<sub>4</sub>, linear or branched;

or

(b)



wherein X is oxygen or sulfur; Y is nitrogen, -CH-, or -C(C<sub>1</sub>-C<sub>4</sub> alkoxy)-; and R'' is hydrogen or C<sub>1</sub>-C<sub>4</sub> alkyl plus

(ii) the quaternary ammonium compound is selected from compounds of formula (III):



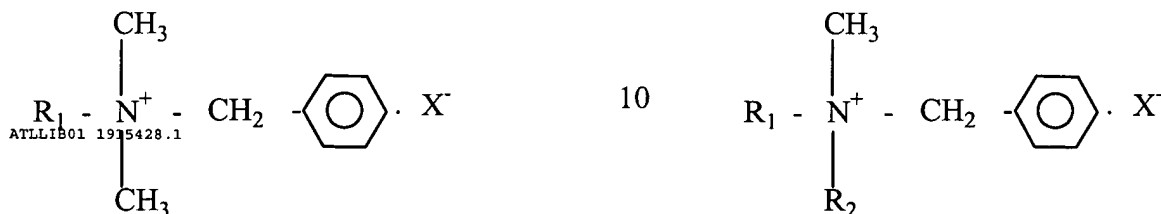
wherein R is an alkyl group having between 6 and 18 carbon atoms and X<sup>-</sup> is an anion which allows ready water solubility of the quaternary ammonium salt,

compounds of formula (IV):



wherein R<sub>1</sub> and R<sub>2</sub> are alkyl groups which may be the same or different and which contain between 6 and 18 carbon atoms, and X<sup>-</sup> is an anion as described above,

compounds of formulae (V) or (VI):

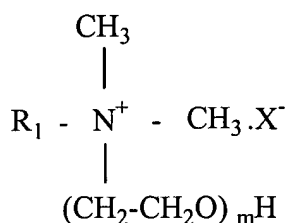




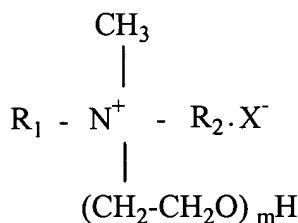


wherein  $R_1$  and  $R_2$  are alkyl groups which can be the same or different and which contain between 6 and 18 carbon atoms and  $X^-$  is an anion as described above.

compounds of formulae (VII) or (VIII):



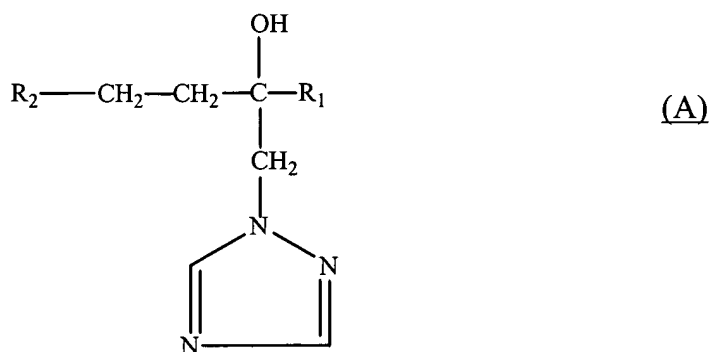
(VII)



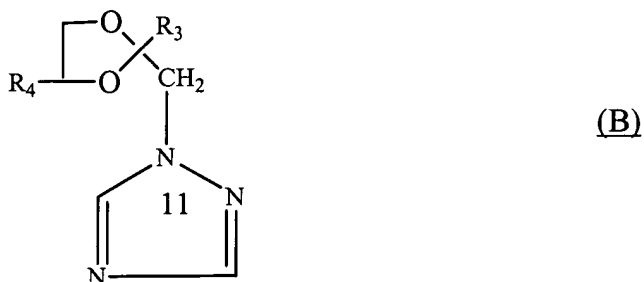
(VIII)

wherein  $R_1$  and  $R_2$  are alkyl groups which may be the same or different and which contain between 6 and 18 carbon atoms and wherein  $m$  is a number between 1 and 20 and

(iii) the triazole compound is selected from compounds of formula (A):



wherein  $R_1$  represents a branched or straight chain  $C_{1-5}$  alkyl group and  $R_2$  represents a phenyl group optionally substituted by one or more substituents selected from halogen atoms or  $C_{1-3}$  alkyl,  $C_{1-3}$  alkoxy, phenyl or nitro groups and compounds of formula (B):



wherein  $R_3$  is as defined for  $R_2$  above and  $R_4$  represents a hydrogen atom or a branched or straight chain  $C_{1-5}$  alkyl group, or

the triazole compound is selected from a group of compounds comprising cyproconazole, hexaconazole and difenaconazole and wherein

when an oxathiazine compound is combined with a quaternary ammonium compound the weight ratio of oxathiazine compound to quaternary ammonium compound is from about 2:1 to about 1:50 and

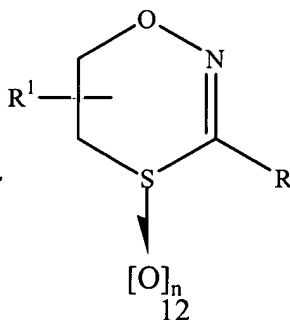
when an oxathiazine compound is combined with a triazole compound the weight ratio of oxathiazine compound to triazole compound is from about 50:1 to about 1:2 and

when an oxathiazine compound is combined with a quaternary ammonium compound and a triazole compound the weight ratio of oxathiazine compound to quaternary ammonium compound is from about 2:1 to about 1:50 and the weight ratio of oxathiazine compound to triazole compound is from about 50:1 to about 1:2.

14. (previously presented) A substrate made of wood or other material treated with a preservative composition as claimed in claim 1.

15. (currently amended) A substrate of wood or other material comprising in synergistic proportions, an oxathiazine compound plus a quaternary ammonium compound or a triazole compound, or both wherein

(i) the oxathiazine compound is a compound of formula (I)



(I)

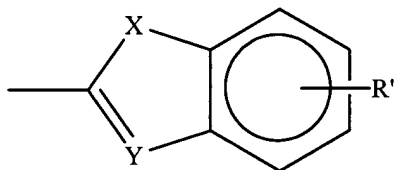
wherein n is 0, 1 or 2; R<sup>1</sup> is hydrogen, C<sub>1</sub>-C<sub>4</sub> linear or branched alkyl, or benzyl; and

R is:

(a) phenyl; naphthyl; phenyl substituted with 1 to 3 of the following substituents: hydroxyl, halo, C<sub>1</sub>-C<sub>12</sub> alkyl, C<sub>5</sub>-C<sub>6</sub> cycloalkyl, trihalomethyl, phenyl, C<sub>1</sub>-C<sub>5</sub> alkoxy, C<sub>1</sub>-C<sub>5</sub> alkylthio, tetrahydropyranyloxy, phenoxy, (C<sub>1</sub>-C<sub>4</sub> alkyl)carbonyl, phenylcarbonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, carboxy or its alkali metal salt, (C<sub>1</sub>-C<sub>4</sub> alkoxy)carbonyl, (C<sub>1</sub>-C<sub>4</sub> alkyl)aminocarbonyl, phenylaminocarbonyl, tolylaminocarbonyl, morpholinocarbonyl, amino, nitro, cyano, dioxolanyl, or (C<sub>1</sub>-C<sub>4</sub> alkoxy)iminomethyl; pyridinyl; thienyl, preferably when n is not 2; furanyl; or thienyl or furanyl substituted with 1 to 3 of the following groups: alkyl, alkoxy, alkylthio, alkoxycarbonyl, halogen, trihalomethyl, cyano, acetyl, benzoyl, nitro, formyl, alkoxyaminomethyl, phenyl, or phenylaminocarbonyl, wherein the alkyl or alkoxy moiety is C<sub>1</sub>-C<sub>4</sub>, linear or branched;

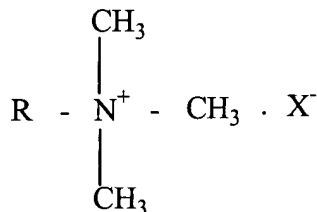
or

(b)



wherein X is oxygen or sulfur; Y is nitrogen, -CH-, or -C(C<sub>1</sub>-C<sub>4</sub> alkoxy)-; and R'' is hydrogen or C<sub>1</sub>-C<sub>4</sub> alkyl plus

(ii) the quaternary ammonium compound is selected from compounds of formula (III):

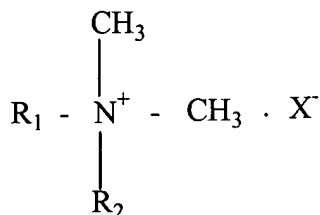


(III)

wherein R is an alkyl group having between 6 and 18 carbon atoms and X<sup>-</sup> is an anion which allows ready water solubility of the quaternary ammonium salt,

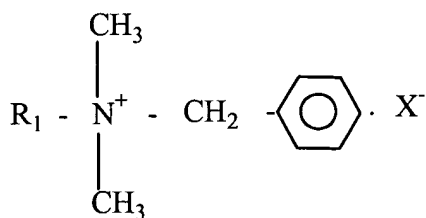
compounds of formula (IV):

(IV)

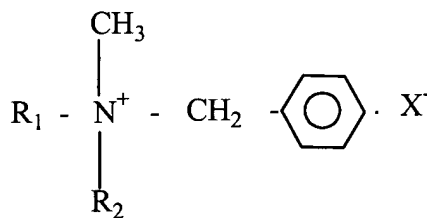


wherein R<sub>1</sub> and R<sub>2</sub> are alkyl groups which may be the same or different and which contain between 6 and 18 carbon atoms, and X<sup>-</sup> is an anion as described above,

compounds of formulae (V) or (VI):



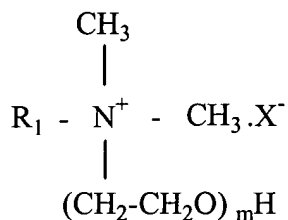
(V)



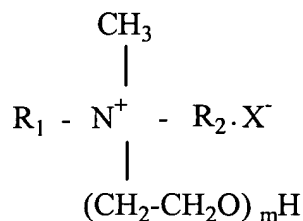
(VI)

wherein R<sub>1</sub> and R<sub>2</sub> are alkyl groups which can be the same or different and which contain between 6 and 18 carbon atoms and X<sup>-</sup> is an anion as described above,

compounds of formulae (VII) or (VIII):



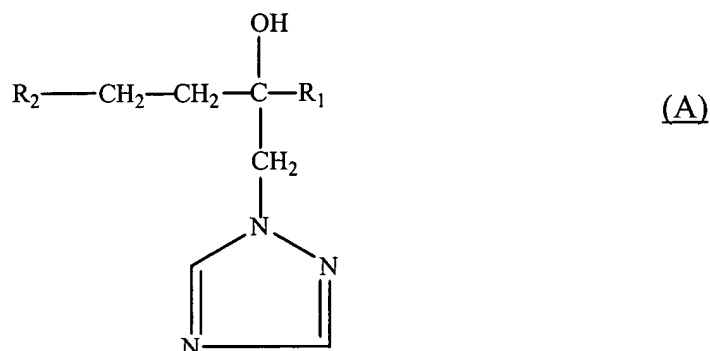
(VII)



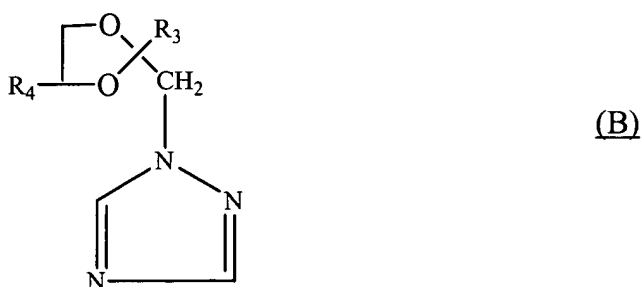
(VIII)

wherein  $R_1$  and  $R_2$  are alkyl groups which may be the same or different and which contain between 6 and 18 carbon atoms and wherein m is a number between 1 and 20 and

(iii) the triazole compound is selected from compounds of formula (A):



wherein  $R_1$  represents a branched or straight chain  $C_{1-5}$  alkyl group and  $R_2$  represents a phenyl group optionally substituted by one or more substituents selected from halogen atoms or  $C_{1-3}$  alkyl,  $C_{1-3}$  alkoxy, phenyl or nitro groups and compounds of formula (B):



wherein  $R_3$  is as defined for  $R_2$  above and  $R_4$  represents a hydrogen atom or a branched or straight chain  $C_{1-5}$  alkyl group, or

the triazole compound is selected from a group of compounds comprising cyproconazole, hexaconazole and difenaconazole and wherein

when an oxathiazine compound is combined with a quaternary ammonium compound the weight ratio of oxathiazine compound to quaternary ammonium compound is from about 2:1 to about 1:50 and

when an oxathiazine compound is combined with a triazole compound the weight ratio of oxathiazine compound to triazole compound is from about 50:1 to about 1:2 and

when an oxathiazine compound is combined with a quaternary ammonium compound and a triazole compound the weight ratio of oxathiazine compound to quaternary ammonium compound is from about 2:1 to about 1:50 and the weight ratio of oxathiazine compound to triazole compound is from about 50:1 to about 1:2.